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UNITED STATES NAVAL OBSERVATORY
CIRCULAR NO. 92

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May 1, 1962

EPHEMERIS OF THE RADIO LONGITUDE OF THE CENTRAL MERIDIAN OF JUPITER

System III (1957.0)

by

Berenice L. Morrison

In accordance with a Report to Commission 40 of the International Astronomical Union by the Working Group, on the definition of longitudes of radio emissions from Jupiter, System III (1957.0) has been defined by a provisionally adopted period, and a central meridian which at the epoch agrees with System II (*Information Bulletin* No. 8, 1962 March, page 4) :

Epoch 1957 January 1.0 U. T. J. D. 243 5839.5

Period $9^{\text{h}} 55^{\text{m}} 29^{\text{s}}.37$

Central meridian

Longitude at epoch $108^{\circ}.02$

Daily motion 870.544

In this *Circular*, an ephemeris of the central meridian of the geometric disk on this system, with the corrections for phase to reduce to the illuminated disk, is given for 1961, 1962, and 1963. Ephemerides for further years will be made available as required.

JUPITER, 1961

LONGITUDE OF CENTRAL MERIDIAN

SYSTEM III (1957.0)

Day (0 ^h U.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	345.6	325.7	216.1	199.6	34.8	23.1	222.9	214.0	203.2	38.4	20.7	210.3
2	135.9	116.1	6.5	350.0	185.4	173.7	13.6	4.7	353.8	188.8	171.0	0.6
3	286.2	266.4	156.9	140.5	335.9	324.4	164.3	155.4	144.3	339.3	321.4	150.9
4	76.5	56.8	307.3	291.0	126.5	115.0	315.0	306.0	294.9	129.7	111.7	301.2
5	226.8	207.1	97.8	81.5	277.0	265.7	105.7	96.7	85.5	280.1	262.1	91.5
6	17.2	357.5	248.2	231.9	67.6	56.3	256.4	247.3	236.0	70.6	52.4	241.8
7	167.5	147.8	38.6	22.4	218.1	206.9	47.0	38.0	26.5	221.0	202.7	32.1
8	317.8	298.2	189.0	172.9	8.7	357.6	197.7	188.6	177.1	11.4	353.1	182.4
9	108.1	88.6	339.4	323.4	159.3	148.2	348.4	339.3	327.6	161.8	143.4	332.7
10	258.4	238.9	129.8	113.9	309.8	298.9	139.1	129.9	118.1	312.3	293.7	123.0
11	48.7	29.3	280.2	264.4	100.4	89.5	289.8	280.6	268.7	102.7	84.1	273.3
12	199.1	179.6	70.7	54.9	251.0	240.2	80.5	71.2	59.2	253.1	234.4	63.5
13	349.4	330.0	221.1	205.4	41.6	30.8	231.2	221.8	209.7	43.5	24.7	213.8
14	139.7	120.4	11.5	355.9	192.2	181.5	21.9	12.5	0.2	193.9	175.0	4.1
15	290.0	270.8	161.9	146.4	342.7	332.2	172.5	163.1	150.7	344.3	325.4	154.4
16	80.3	61.1	312.4	296.9	133.3	122.8	323.2	313.7	301.3	134.7	115.7	304.7
17	230.7	211.5	102.8	87.4	283.9	273.5	113.9	104.3	91.8	285.1	266.0	95.0
18	21.0	1.9	253.2	237.9	74.5	64.2	264.6	254.9	242.3	75.5	56.3	245.3
19	171.3	152.3	43.7	28.4	225.1	214.8	55.3	45.6	32.8	225.9	206.6	35.6
20	321.7	302.6	194.1	178.9	15.7	5.5	205.9	196.2	183.2	16.3	357.0	185.8
21	112.0	93.0	344.5	329.5	166.3	156.2	356.6	346.8	333.7	166.6	147.3	336.1
22	262.3	243.4	135.0	120.0	316.9	306.8	147.3	137.4	124.2	317.0	297.6	126.4
23	52.6	33.8	285.4	270.5	107.5	97.5	298.0	288.0	274.7	107.4	87.9	276.7
24	203.0	184.2	75.9	61.0	258.1	248.2	88.7	78.6	65.2	257.8	238.2	67.0
25	353.3	334.6	226.3	211.6	48.8	38.9	239.3	229.2	215.6	48.2	28.5	217.3
26	143.7	125.0	16.8	2.1	199.4	189.5	30.0	19.8	6.1	198.5	178.8	7.6
27	294.0	275.4	167.2	152.6	350.0	340.2	180.7	170.3	156.6	348.9	329.1	157.8
28	84.3	65.7	317.7	303.2	140.6	130.9	331.4	320.9	307.0	139.2	119.4	308.1
29	234.7		108.2	93.7	291.2	281.6	122.0	111.5	97.5	289.6	269.7	98.4
30	25.0		258.6	244.3	81.9	72.3	272.7	262.1	247.9	80.0	60.0	248.7
31	175.4		49.1		232.5		63.4	52.7		230.3		39.0

CORRECTION FOR PHASE

Jan.	Mar.	May	July	Sept.	Nov.
1	2	1	4	2	1
0.0	+0.3	+0.6	+0.1	-0.2	-0.5
5	6	5	8	6	5
.0	.3	.6	.1	.3	.5
9	10	9	12	10	9
.0	.3	.5	.0	.3	.5
13	14	13	16	14	13
.0	.4	.5	.0	.4	.5
17	18	17	20	18	17
.0	.4	.5	.0	.4	.5
21	22	21	24	22	21
.0	.4	.5	.0	.4	.4
25	26	25	28	26	25
.0	.4	.5	.0	.5	.4
29	30	29		30	29
+.1	.5	.4		.5	.4
Feb.	Apr.	June	Aug.	Oct.	Dec.
2	3	2	1	4	3
+0.1	+0.5	+0.4	0.0	-0.5	-0.4
6	7	6	5	8	7
.1	.5	.4	.0	.5	.3
10	11	10	9	12	11
.1	.5	.3	.0	.5	.3
14	15	14	13	16	15
.1	.5	.3	-.1	.6	.3
18	19	18	17	20	19
.2	.5	.2	.1	.6	.2
22	23	22	21	24	23
.2	.6	.2	.1	.6	.2
26	27	26	25	28	27
+0.2	+0.6	.2	.2	-0.6	.2
		30	29		31
		+0.1	-0.2		-0.2

LONGITUDE OF CENTRAL MERIDIAN

Day (0 ^h U.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	189,3	168,2	57,0	38,0	230,4	215,5	52,6	42,6	33,8	233,0	219,3	51,6
2	339,5	318,5	207,3	188,4	20,9	6,1	203,2	193,3	184,5	23,6	9,8	202,0
3	129,8	108,8	357,6	338,8	171,3	156,6	353,8	344,0	335,2	174,2	160,3	352,3
4	280,1	259,1	148,0	129,1	321,8	307,1	144,4	134,7	125,9	324,7	310,7	142,7
5	70,4	49,4	298,3	279,5	112,2	97,7	295,0	285,4	276,5	115,3	101,2	293,0
6	220,7	199,7	88,6	69,9	262,7	248,2	85,7	76,0	67,2	265,9	251,6	83,4
7	11,0	350,0	239,0	220,3	53,2	38,7	236,3	226,7	217,9	56,5	42,0	233,7
8	161,2	140,3	29,3	10,7	203,6	189,3	26,9	17,4	8,5	207,0	192,5	24,1
9	311,5	290,6	179,7	161,1	354,1	339,8	177,6	168,1	159,2	357,6	342,9	174,4
10	101,8	80,9	330,0	311,5	144,6	130,4	328,2	318,8	309,8	148,1	133,3	324,8
11	252,1	231,2	120,3	101,9	295,0	280,9	118,8	109,5	100,5	298,7	283,8	115,1
12	42,4	21,5	270,7	252,3	85,5	71,5	269,5	260,1	251,1	89,2	74,2	265,4
13	192,7	171,8	61,0	42,7	236,0	222,1	60,1	50,8	41,8	239,8	224,6	55,8
14	343,0	322,2	211,4	193,1	26,5	12,6	210,7	201,5	192,4	30,3	15,0	206,1
15	133,3	112,5	1,7	343,6	176,9	163,2	1,4	352,2	343,1	180,9	165,4	356,4
16	283,5	262,8	152,1	134,0	327,4	313,7	152,0	142,9	133,7	331,4	315,9	146,7
17	73,8	53,1	302,5	284,4	117,9	104,3	302,7	293,6	284,4	121,9	106,3	297,1
18	224,1	203,4	92,8	74,8	268,4	254,9	93,3	84,3	75,0	272,4	256,7	87,4
19	14,4	353,7	243,2	225,2	58,9	45,5	244,0	235,0	225,6	63,0	47,1	237,7
20	164,7	144,0	33,5	15,6	209,4	196,0	34,6	25,6	16,3	213,5	197,5	28,0
21	315,0	294,4	183,9	166,1	359,9	346,6	185,3	176,3	166,9	4,0	347,9	178,3
22	105,3	84,7	334,3	316,5	150,4	137,2	336,0	327,0	317,5	154,5	138,2	328,7
23	255,5	235,0	124,6	106,9	300,9	287,8	126,6	117,7	108,1	305,0	288,6	119,0
24	45,8	25,3	275,0	257,4	91,4	78,4	277,3	268,4	258,8	95,5	79,0	269,3
25	196,1	175,6	65,4	47,8	241,9	229,0	67,9	59,1	49,4	246,0	229,4	59,6
26	346,4	326,0	215,7	198,2	32,4	19,6	218,6	209,8	200,0	36,5	19,8	209,9
27	136,7	116,3	6,1	348,7	182,9	170,2	9,3	0,4	350,6	187,0	170,1	0,2
28	287,0	266,6	156,5	139,1	333,4	320,8	159,9	151,1	141,2	337,4	320,5	150,5
29	77,3		306,8	289,5	124,0	111,4	310,6	301,8	291,8	127,9	110,9	300,8
30	227,6		97,2	80,0	274,5	262,0	101,3	92,5	82,4	278,4	261,2	91,1
31	17,9		247,6		65,0		252,0	243,2		68,9		241,4

[illegible]

JUPITER, 1963

LONGITUDE OF CENTRAL MERIDIAN

SYSTEM III (1957.0)

Day (0 ^h U.T.)	JAN.	FEB.	MAR.	APR.	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1	31.7	10.6	258.4	237.8	68.0	50.3	244.2	231.1	220.6	61.1	51.5	248.1
2	182.0	160.8	48.7	28.1	218.4	200.7	34.7	21.7	11.3	211.8	202.1	38.6
3	332.3	311.1	199.0	178.4	8.7	351.1	185.2	172.3	162.0	2.5	352.7	189.1
4	122.6	101.4	349.3	328.7	159.1	141.6	335.7	322.9	312.6	153.2	143.3	339.6
5	272.9	251.7	139.6	119.1	309.5	292.0	126.2	113.5	103.3	303.8	293.9	130.0
6	63.2	42.0	289.9	269.4	99.9	82.4	276.7	264.1	254.0	94.5	84.5	280.5
7	213.5	192.2	80.2	59.7	250.2	232.9	67.3	54.7	44.6	245.2	235.1	71.0
8	3.8	342.5	230.5	210.0	40.6	23.3	217.8	205.3	195.3	35.9	25.7	221.4
9	154.1	132.8	20.8	0.4	191.0	173.8	8.3	355.9	346.0	186.5	176.3	11.9
10	304.4	283.1	171.1	150.7	341.4	324.2	158.8	146.5	136.7	337.2	326.9	162.4
11	94.7	73.4	321.3	301.0	131.8	114.7	309.4	297.1	287.4	127.9	117.4	312.8
12	244.9	223.6	111.6	91.4	282.1	265.1	99.9	87.7	78.0	278.6	268.0	103.3
13	35.2	13.9	261.9	241.7	72.5	55.6	250.4	238.4	228.7	69.2	58.6	253.7
14	185.5	164.2	52.2	32.0	222.9	206.0	41.0	29.0	19.4	219.9	209.1	44.1
15	335.8	314.5	202.5	182.4	13.3	356.5	191.5	179.6	170.1	10.6	359.7	194.6
16	126.1	104.7	352.8	332.7	163.7	147.0	342.0	330.2	320.8	161.2	150.3	345.0
17	276.4	255.0	143.1	123.1	314.1	297.4	132.6	120.9	111.5	311.9	300.8	135.4
18	66.7	45.3	293.4	273.4	104.5	87.9	283.1	271.5	262.2	102.6	91.4	285.9
19	216.9	195.6	83.7	63.7	254.9	238.4	73.7	62.1	52.8	253.2	241.9	76.3
20	7.2	345.9	234.0	214.1	45.3	28.8	224.2	212.8	203.5	43.9	32.4	226.7
21	157.5	136.2	24.3	4.4	195.7	179.3	14.8	3.4	354.2	194.5	183.0	17.1
22	307.8	286.4	174.7	154.8	346.1	329.8	165.3	154.1	144.9	345.2	333.5	167.5
23	98.1	76.7	325.0	305.1	136.5	120.3	315.9	304.7	295.6	135.8	124.0	317.9
24	248.3	227.0	115.3	95.5	286.9	270.7	106.5	95.4	86.3	286.5	274.6	108.3
25	38.6	17.3	265.6	245.8	77.3	61.2	257.0	246.0	237.0	77.1	65.1	258.7
26	188.9	167.6	55.9	36.2	227.7	211.7	47.6	36.7	27.7	227.7	215.6	49.1
27	339.2	317.9	206.2	186.6	18.2	2.2	198.2	187.3	178.3	18.4	6.1	199.5
28	129.5	108.1	356.5	336.9	168.6	152.7	348.8	338.0	329.0	169.0	156.6	349.9
29	279.7		146.8	127.3	319.0	303.2	139.3	128.6	119.7	319.6	307.1	140.3
30	70.0		297.1	277.6	109.4	93.7	289.9	279.3	270.4	110.2	97.6	290.7
31	220.3		87.5		259.9		80.5	69.9		260.9		81.1

CORRECTION FOR PHASE

Jan.	Mar.	May	July	Sept.	Nov.
-1	4	3	2	4	3
3	8	7	6	8	7
7	12	11	10	12	11
11	16	15	14	16	15
15	20	19	18	20	19
19	24	23	22	24	23
23	28	27	26	28	27
27		31	30		
31					
Feb.	Apr.	June	Aug.	Oct.	Dec.
4	1	4	3	2	1
8	5	8	7	6	5
12	9	12	11	10	9
16	13	16	15	14	13
20	17	20	19	18	17
24	21	24	23	22	21
28	25	28	27	26	25
	29		31	30	29
					33